Protected Areas, Indigenous Peoples, and The Western Idea of Nature

by Dennis Martinez

Significant ecological knowledge derived from centuries of living as part of nature resides within Native American cultures.

In 1930, about four decades after the Oglala Lakota (Sioux) were forced to dramatically decrease the size of the reservation provided for them in the 1868 Fort Laramie Treaty and one year after the Congressional authorization of the Badlands National Monument, Lakota spiritual leader Black Elk observed that the United States government had "made little islands for us and other little islands for the four-leggeds," (Neihardt, 1959, p. 9), and that these "islands" would become increasingly separated as time passed. History has proven Black Elk correct, not only in terms of actual acres allocated to wilderness and the "four-leggeds," but in the way in which the National Park Service and other government agencies continue to foster an estrangement between indigenous activities and designated wild places.

It may come as a surprise to some that some 70 years before the removal of Indians from the Badlands National Monument, many Americans perceived wilderness to be incomplete and unnatural without native peoples. Indians were seen as part of the natural world. For example, in 1833, George Catlin, the famous early 19th century painter of Indians from the Plains and Rocky Mountains, proposed that the government preserve large expanses of land in their "pristine beauty and wildness... where the world could see for ages to come, the native Indian in his classic attire, galloping his horse...amid the fleeting herds of elks and buffaloes." Catlin called his vision a "nation's Park, containing man and beast, in all the wild and freshness of their nature's beauty." (*New York Daily Commercial Advertiser* 1833, quoted in Spence 1999, p. 10)

Perhaps even more surprising is the little-known fact that several American proponents of environmental preservation, including Washington Irving, John James Audubon, and Henry David Thoreau shared Catlin's sentiments. "In Wildness is the preservation of the World," Thoreau's famous statement made shortly before his death in 1862, was voiced not only to save vast acreages of "wildness," but Indians in their native "wild" habitat, thereby preserving, in Thoreau's view, the keepers of true wisdom and wildness. This more complete wilderness was what Thoreau thought civilized Americans needed. (Note that Thoreau said "wildness," not the popular misquote, "wilderness.")

The importance of wildness as an antidote to the abstracting and alienating tendencies of urban civilization remains a dearly held value by many modern environmentalists. Deep ecologist Jack Turner, who environmental poet Gary Snyder has likened to Thoreau, wrote in *The Abstract Wild* (1996): "In our effort to go beyond anthropogenic defenses of nature, to emphasize its intrinsic value and right to exist independently of us, we forget the reciprocity between the wild in nature and the wild in us, between knowledge of

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the wild and knowledge of the self that was central to all primitive [sic] cultures…'wild' names the quality of a relationship, one in which we are not in control." With respect to "wilderness," Turner writes: "…what counts as wilderness is not determined by the absence of people, but by the relationship between people and place" (p. 26).

Native peoples recognize a similar relationship with nature—a relationship "in which we are not in control." As desert ecologist Gary Nabhan points out in *Cultures of Habitat* (1997), the O'odham (Pima) word for wilderness, *doajkam*, is "etymologically tied to terms for health, wholeness, and liveliness" (p. 162). This is not so different from the etymology of the English word for nature, which comes from the Latin nasci meaning "to be born," that is, with a life force of its own guiding its own unfolding or becoming. The O'odham, like most indigenous peoples, also feel a sense of responsibility for the maintenance of creation—a responsibility that they exercised through their ceremonial participation in the yearly "re-creation" of the world as *supplicants* to natural forces over which they have no control. In other words: *One prays for rain because one has no direct control over rain.*

This essay will focus on an issue that is implicit in Nabhan's characterization of O'odham beliefs—the extent to which the physical modification of habitats by humans is either "natural" or "ecological."

Returning to the O'odham concept of wildness, I would like to focus on the distinction the O'odham draw between that part of nature over which we have little control (the wild) and that part that we manipulate or modify (the cultivated). As Nabhan points out in his essay, "Cultural Parallax," because cultures perceive nature differently, what may look like uninhabited wilderness to outsiders often includes cultivated habitats in which native people actively participate (Nabhan 1997, p. 163). In the same essay, Nabhan offers an example of an environment that non-natives would call a wasteland—the desert home of the Tohono O'odham (Papago). The Tohono O'odham word for desert is *tohono*, which means a "bright and shining place." The English word "desert" comes from the French *deserter*, which means "a place abandoned or left wasted." Interestingly enough, the word "wilderness" has the same connotation to many indigenous peoples as the English word "desert"—an uncared for place.

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Nabhan also points out that there is a third state of nature that results when the "failure to take care of a horse or a crop may allow it to go feral, *but this degenerated feral state is different from being truly wild.*" (italics mine). The O'odham, we may recall, believe that they have certain responsibilities of care-giving. If they fail to exercise those responsibilities, for example, by letting culturally important plants go feral, then they leave nature in a degenerated feral state that is something different than either a truly wild state or the cultivated state.

I have participated in such a care-giving experience. In 1994, I helped organize an intertribal effort in southwestern Oregon to bring back, after an absence of 150 years or more, an experience we call the Salmon Homecoming and Thanksgiving Ceremony. Although salmon are wild, they are, like all plants, animals, and natural forces, related to humans. Their flesh sustains us, but their spirits live on. They see how we treat them. If we treat them well, they will continue to come back. Ceremonies like the Salmon Homecoming honor their sacrifice. Ceremonies make the world whole again—all of the world, whether it be "wild," "feral" or "cultivated." The differences are not as important in daily living as the similarities. We don't "control" the annual migrations of anadramous fish such as salmon. But this doesn't absolve us of our care-giving responsibilities, which for Pacific Northwest tribes included cleaning spawning beds, burning to lower evapotranspiration and retain sufficient water quantity, opening sand-blocked river mouths for fish passage, and regulating fishing areas, gear, and practices.

While tribes differ considerably with respect to their specific practices in their own unique habitats, it is safe to say that for indigenous peoples globally, *culture overlaps with wild nature*. People inhabited wild nature but also manipulated wild plants and animals through a variety of means, including intentional fire, cultivation, selective harvesting, outplanting, pruning, and more. All of this—the distinctly wild, the feral, and the "cultivated" (whether by fire, digging stick, or field hoe) comprised in its totality what we could, following the lead of Western ecologists, call "ecological integrity."

As wildlife biologist and political scientist Charles Kay argues, Indians were keystone players in ecosystem dynamics in North America (Editor's note: See review of Kay's book, *Wilderness and Political Ecology: Aboriginal Influences and the Original State of Nature* in this issue.). They were top carnivores, until their removal to reservations. Kay has shown the negative effects of this ecological loss through field studies in Yellowstone and Jasper National Parks. Ungulates, such as elk, when protected for viewing by tourists in national parks (much like Indians were allowed to stay in National Parks, such as Glacier and Yosemite, as long as their presence promoted tourism), have increased to a point vastly exceeding the carrying capacity of their ranges. As a result, they destroy native grasses and ecologically critical riparian browse, such as aspen and willow, and promote invasion by unpalatable exotic range plants.

Indians did not have to manipulate the entire or even a major part of their environment to affect an ecosystem's structure, composition, or function. For example, which patch of land an Indian tribe decided to burn that year, that is the

selectivity of prescription fire, was perhaps more important than its frequency, extent, seasonality, or intensity. The incredible length of time that native peoples have been interacting with their environment in particular places has unquestionably led to intimate co-evolution and co-adaptation with plants and animals, affecting their genetic makeup. For example, selective harvesting of wild foods and periodic burning of wild plants favored plants that were productive and easy to harvest; of the right shape, size and taste; fire adapted; and had medicinal or ceremonial uses. Moreover, there are numerous examples of culturally important plant populations that actually decreased in numbers when Indian management ceased. These include tobacco species, "Indian potatoes" such as *Triteleia*, *Camas* and *Calochortus*, cordage species such as *Apocynum* and *Asclepias*, and medicinals, such as *Angelica* and *Lomatium*.

The development of the scientific rationale for Indian removal took form gradually and in line with a nascent NPS policy that perceived Indians as inimical to wilderness preservation. The real issue, of course, was the desire for absolute control of all NPS holdings. Partly assimilated Indians in white man's clothes did not seem to fit the romantic image of the historical Indian as a pure and undefiled child of nature. Park managers wanted a "pure" wilderness. Besides, Indian removal would further the popular new policy of assimilation. Hunting and intentional burning, both considered "unnatural," had already been banned (although enforcement was, and in Glacier National Park still is, problematic). Biologists, such as Joseph Grinnell of the University of California, George Wright of the NPS, and other scientists lent credibility to this new wilderness policy. *As the historical Indian disappeared, so would the memory of their integral role in the ecology of their homeland disappear.*

In *Playing God in Yellowstone*, Alton Chase (1986) exposed the kinds of convoluted reasoning that supported the National Park Service hands-off management policy—a policy that increasingly became a sham following the creation of the National Park Service in 1916, and which gained real momentum with the development of the concept of "natural self-regulation." Natural self-regulation theory, which served as the putative scientific underpinning for the policy, held that animal deaths due to starvation on an over-browsed and degraded winter range would be automatically compensated for by more births. This way of managing led to surreptitious reversals in policy when it was convenient, including the killing of overabundant elk and endangered grizzly bears alike. Field studies by wildlife biologists, such as the Craigheads's studies of grizzly bear populations in Yellowstone during the 1970s (Craighead and others 1995), definitively refuted that claim, although the National Park Service repressed the reports.

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Over time, natural self-regulation became a convenient excuse for the failed management policies described above. The science that had given credibility to the idea of wilderness without Indians was scuttled by park managers to promote tourism. Tourists at Yellowstone were to be given what they wanted in spite of the ecological costs, and what tourists wanted was both artificially managed elk herds and a "pure" wilderness experience. So while elk were being fed artificially in winter, Yellowstone management was creating the illusion of wilderness through its pseudo-scientific policy of natural self-regulation. The National Park Service "let-burn" policy—even when fuel loads were completely outside the range of natural variability and natural fire cycles (which included Indian burning) had been repeatedly missed—is another example of pseudo-science being used to justify an impossible and contradictory attempt to create the illusion of wilderness.

Fiercely held beliefs about the place of humans in nature also inspire political agendas, the success or failure of which hold ominous consequences for both our wild lands and the native peoples who call them home. These consequences may indeed manifest themselves in the future direction of ecological restoration and in the fate of the cultural survival of 600 million indigenous persons globally.

Thomas Vale, a geographer from the University of Wisconsin-Madison and editor of a recently published book, *Fire, Native Peoples, and the Natural Landscape* (2002, Island Press, see review in *ER* 20(1):69-70), is representative of a growing number of natural scientists who discount the positive role of Indians in North American ecosystems. Their political agenda is the preservation of wilderness, not indigenous cultures. These academics invoke climate as the basic natural explanation for changes in landscape vegetation structure and composition over time. They argue that, while Indians may have burned around permanent village sites, (for example, in Yosemite Valley), the vast backcountry (wilderness) was left wild. This argument, however, ignores the seasonal rounds Indians made into the backcountry where culturally important plants and wildlife habitat were regularly burned to enhance productivity. Selective use of fire created and maintained what amounted to refugia for plants and animals adapted to fire and sunny, open habitat. These scattered patches, some thousands of acres in size (especially those for the rejuvenation of wildlife habitat), may not have occurred everywhere, but where they did occur

they contributed to the stability, function, and integrity of the landscape. One must also remember that it is not the size of a burn so much as where a place was burned. For example, riparian areas, which comprise about 5-percent of the total land area in western North America, are used by up to 80-percent of wildlife at some point in their lives. Burning or not burning, then, can make a significant difference in terms of wildlife habitat.

Few would dispute the overarching role of macro-climatic regimes. Climate has an explanatory value precisely at the macro-scale. However, this in no way invalidates the importance of small-scale events, like Indian burning, especially when these small-scale events are considered in their aggregate. In other words, macro-climatic as *the only* scientific explanation is in a kind of spatial/temporal disequilibrium with the micro-scale at which Indian cultural practices occurred and at which current ecological restoration occurs. It must be remembered that Indians as a keystone species were important to North American ecosystems far out of proportion to their actual population size. *Descriptive ecology at the macro-scale is simply an irrelevant explanation when one considers the needs of ecological restoration or the impact locally of Indian burning.*

It is instructive to remember Yellowstone's natural self-regulation policy. Climate was invoked to explain why elk winter range was being degraded, why aspen was not regenerating, and why fuel loads were mounting in the forest! Apparently, in the desire to find a *natural* explanation for failed management policies, management forgot the obvious: human use and local climate interact in ways that synergistically amplify both.

Indigenous cultural survival depends on healthy land. Degraded ancestral lands require restoration. The climate argument, like the natural self-regulation argument, does not address either the cultural survival of indigenous people or the ecological survival of protected areas. Indeed, healthy lands depend on the survival of indigenous peoples and their positive role as keystone players in our planet's diverse ecosystems. So, it may come as no surprise that the World Conservation Union (IUCN) reports that at least 80 percent of the world's biological "hot spots" are the homelands of indigenous peoples.

The survival of these "hot spots" and their complementary indigenous peoples may well depend on how we define nature. If we view nature as functioning best without human care-givers, then not only will American Indians continue to be locked out of their ancestral lands, but the freedom of religion guaranteed by the First Amendment of the Constitution will be denied them. Native Americans have never won a single legal case for sacred site protection based on First Amendment rights because Indian sacred sites occur in *natural* places and are not built by human labor, like non-Indian churches or mosques.

Let me put this into a familiar perspective. Would we refuse a healing treatment because the doctor was interfering with a natural process? A medical doctor, like ecological restorationists, works with natural processes, intervening no more than necessary to nudge nature just enough to change its natural trajectory from a human caused downward spiral to one that is potentially positive. This is our role in nature, as indigenous cultures remind us, and the reason we have the privilege of living on Earth.

Yet we seem to be in a cultural double-bind. On the one hand, 1.5 million years of human evolution *within* nature tells us that we are an integral part of the natural world. On the other, the Western idea of nature, which is only about 150 years old, tells us that we are separate from nature. Western ecological science has sequestered itself in either the obtuse language of mathematics in its description of nature or has resorted to mysterious concepts, such as natural self-regulation, at time and space scales that are mostly irrelevant to the scale at which humans operate. All this is occurring at the very time when the earth and its inhabitants are most in need of healing. Native cultures, although badly fragmented by the impacts of industrial societies, still hold onto significant ecological wisdom based on long ecological experience in particular places. To ignore that millennia-long local experience and knowledge is to risk doing poor science. The Precautionary Principle should be involved when we, in our extremely short tenure in this continent, think we know enough to claim that indigenous peoples did not, and do not, matter ecologically.

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